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National Marine Fisheries Service

Rolland A. Schmitten Assistant Administrator for Fisheries



A Commemorative Edition in Celebration of the International Year of the Ocean, 1998

Consisting of Selected Plates from

THE FISHERIES AND FISHERY
INDUSTRIES OF THE UNITED STATES

by George Brown Goode U.S. Commission of Fish and Fisheries 1887

Anneka W. Bane, Editor



t is with great pleasure that the National Oceanic and Atmospheric Administration (NOAA) presents this commemorative volume of selected historic illustrations of America's early fisheries. These reproduced plates are from a rare publication, The Fisheries and Fishery Industries of the United States, published one hundred years ago by the

United States Commission of Fish and Fisheries.\* The Commission was formed in 1871 as the first federal agency concerned with natural resource conservation. It was the predecessor of today's National Marine Fisheries Service, charged with stewardship of America's living

marine resources.

The first Commissioner of Fisheries was Spencer F. Baird, who was also Assistant Secretary of the venerable Smithsonian Institution. At the time, Dr. Baird's assistant was Dr. George Brown Goode, who himself later became Commissioner of Fisheries and then, in 1887 when this remarkable five-volume work was published, Assistant Secretary of the Smithsonian. Dr. Goode, a preeminent American ichthyologist, is well known to generations of fisheries scientists for his works, especially *Oceanic Ichthyology*, co-authored by Dr. Tarleton H. Bean and still considered the best work on deep-sea fishes.

The Smithsonian's partnership with federal fisheries management continues to this day, even housing the Fisheries Service's National Systematics Laboratory under the roof of the National Museum of Natural History. The laboratory and the Fisheries Service's many other facilities carry on the tradition of research on marine species of economic or ecological importance begun by Baird and Goode more than a century ago.

This book of selected plates is thus a fitting tribute to the "progressive conservation movement" era ushered in 100 years ago by Baird, Goode, and others concerned about the young nation's rapidly vanishing natural resources. The commemoration of America's fisheries legacy is especially timely—sustainability is one of the most important issues behind the United Nations declaration of 1998 as "The Year of the Ocean." The Fisheries Service and its parent organization, NOAA, are proud to participate in this global movement of governments, businesses, organizations and individuals to promote public awareness and understanding of the oceans' vital role in all our lives.

Rolland A. Schmitten

NOAA Assistant Administrator for Fisheries

Silver Spring, Maryland

<sup>\*</sup> A complete set of the original 255 plates has been archived as 35-mm images at the NOAA Central Library. Interested users should contact the Library at SSMC3, 1315 East-West Highway, Silver Spring, MD 20910.



# Foreword

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Original plates engraved by the Photo-Engraving Company of New York City. The editor has sought to preserve the original spelling, punctuation, and terminology, except where confusion might exist. In at least one case, plate 78, the species identified in the original is not correct.





**Dem England fresh halibut fishery.** Halibut schooner under jib, foresail, and double-reefed mainsail; nests of dories on deck amidships; rigged for fall and winter fishing. *Drawing by Capt. J. W. Collins.* 



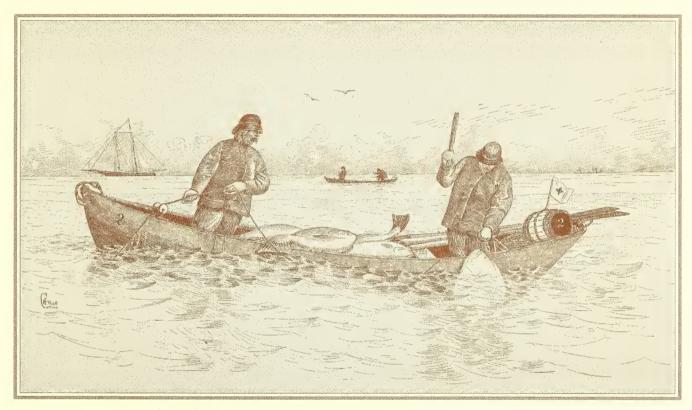




**Dew England fresh halibut fishery.** Cutting bait and baiting trawls on halibut schooner at anchor on the fishing grounds. *Drawing by H.W. Elliott and Capt. J.W. Collins*.







**Dew England fresh halibut fishery.** Halibut dory and crew hauling the trawl, gaffing and clubbing the halibut. *Drawing by H. W. Elliott and Capt. J. W. Collins.* 







**Dem England fresh halibut fishery.** Dory and crew caught to leeward in a storm while hauling the trawl; trawl-buoy and line drifted astern of the vessel for their rescue. *Drawing by H.W. Elliott and Capt. J.W. Collins.* 



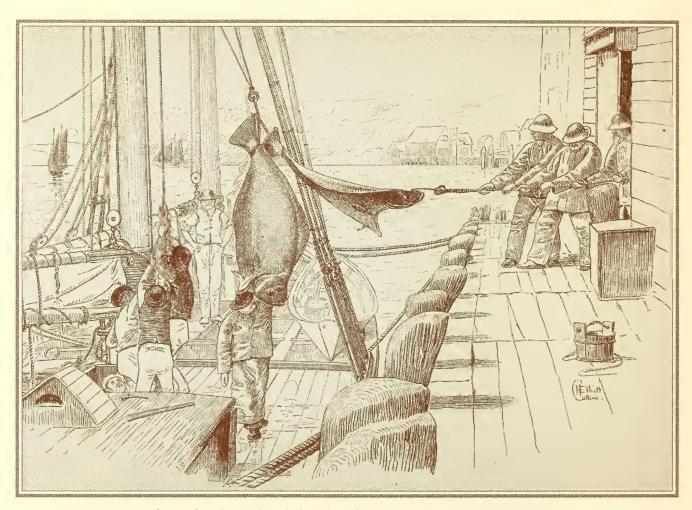




**New England fresh halibut fishery.** Dressing halibut on deck of schooner for icing in the hold. From photograph by T.W. Smillie.



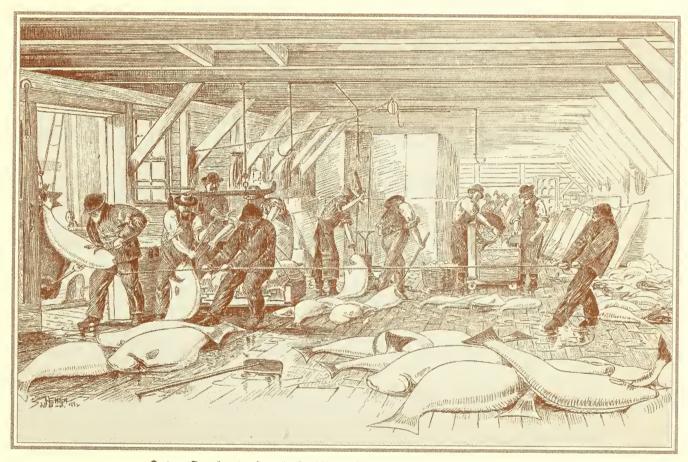




**Dew England fresh halibut fishery.** Hoisting halibut from hold of schooner at Gloucester, Massachusetts. From photograph by T.W. Smillie.



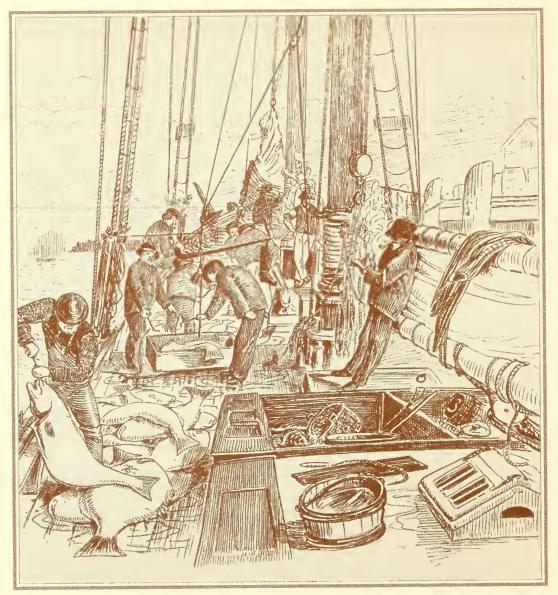




Dew England fresh halibut fishery. Weighing and selling halibut on deck of George's Bank hand-line cod schooner. Drawing by H.W. Elliott and Capt. J.W. Collins.



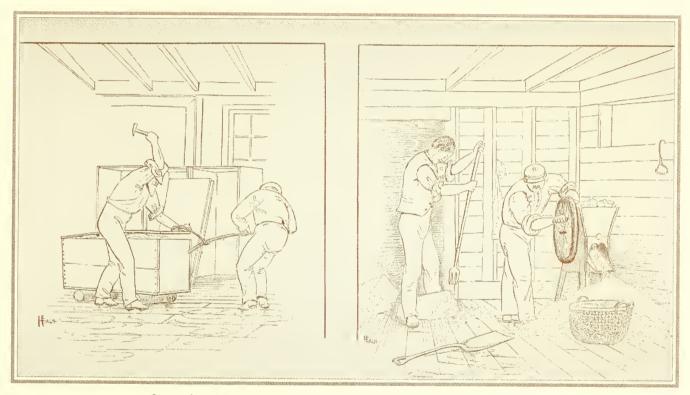




**Rew England fresh halibut fishery.** Handling fresh halibut at Gloucester, Massachusetts.; weighing, unheading, and packing in ice for shipment by rail. *Drawing by H.W. Elliott* 



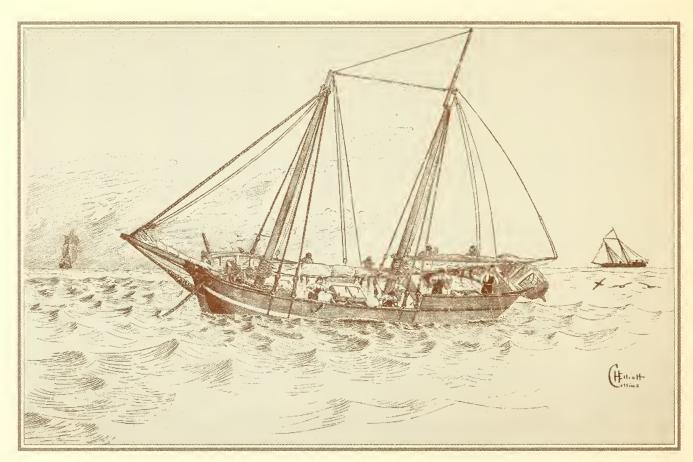




**Dew England fresh halibut fishery.** Packing fresh halibut at Gloucester, Massachusetts.; preparing ice with pick and grinding machine; nailing covers on the boxes; use of devil's claw. *Drawing by H.W. Elliott.* 



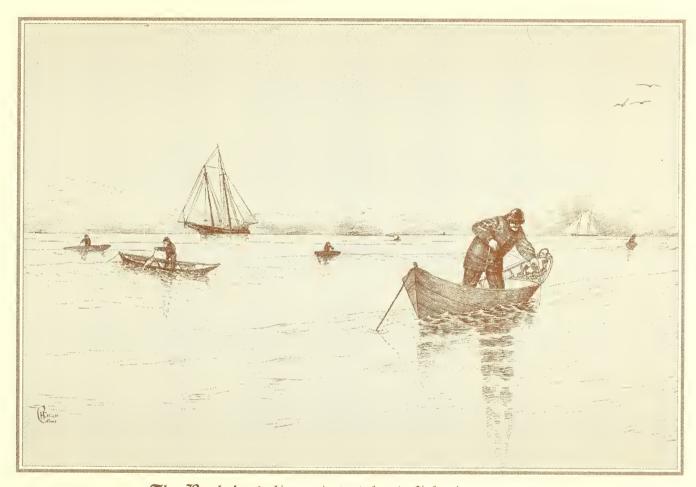




**The Bank hand-line and trawl cod fisheries.** Old-style Grand Bank cod schooner; crew at rails hand-line fishing. *Drawing by H. W. Elliott and Capt. J. W. Collins.* 







The Bank hand-line and trawl cod fisheries. Hand-line dory cod fishing on the Grand Bank. Drawing by H.W. Elliott and Capt. J.W. Collins.

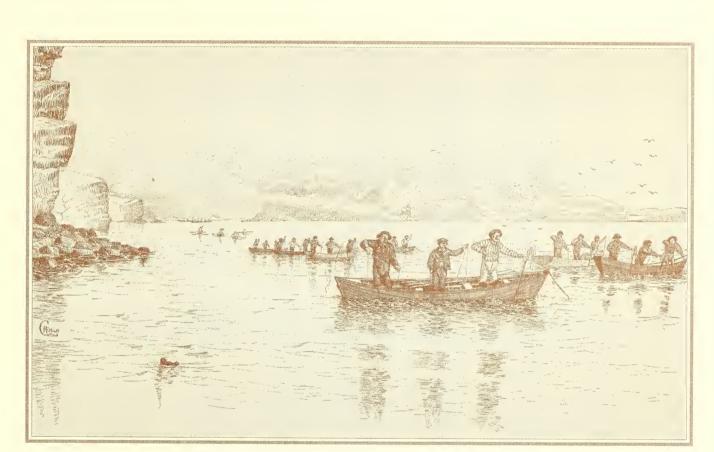






The Bank hand-line and trawl cod fisheries. Dory and crew setting cod trawls on the Bank. *Drawing by H.W. Elliott and Capt. J.W. Collins.* 

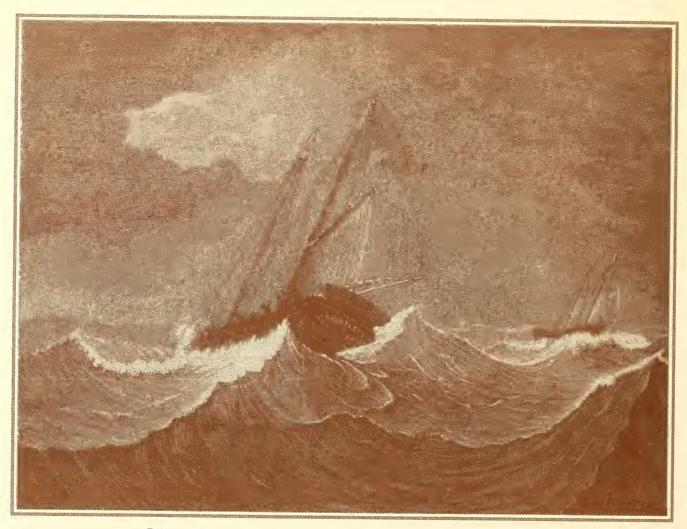




**The Bank hand-line and trawl cod fisheries.** Newfoundland fishermen catching squid for sale as cod bait to United States vessels. *Drawing by H. W. Elliott and Capt. J. W. Collins.* 



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The George's Bank cod fishery. Gloucester schooner at anchor on George's Bank in winter; hand-line fishing for cod; rigged without topmasts for rough weather. From painting by Paul E. Collins, Boston, Massachusetts.







The George's Bank cod fishery. George's Bank crew handline fishing, gaffing fish over the rail, cutting out tongues. *Drawing by H.W. Elliott and Capt. J.W. Collins*.



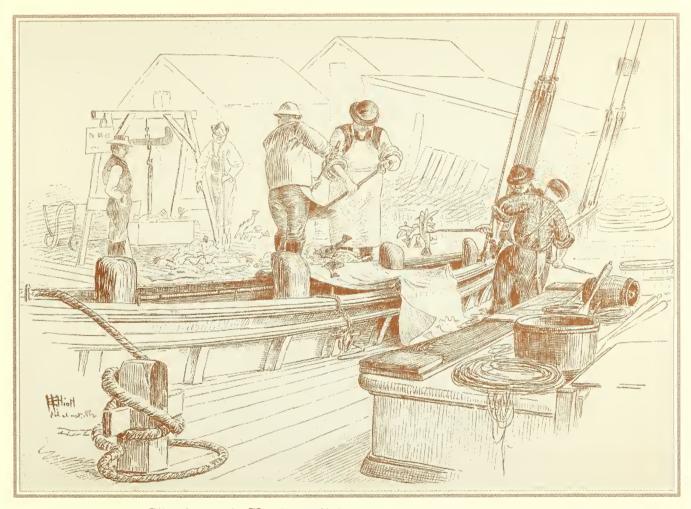




The George's Bank cod fishery. Dressing cod on deck of fishing schooner. Drawing by II. W. Elliott and Capt. J. W. Collins.



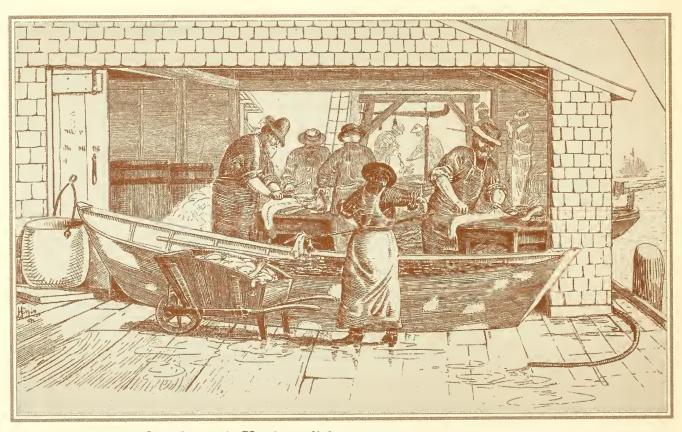




**The George's Bank cod fishery.** Discharging fare of George's Bank cod at Gloucester wharf. *Drawing by H.W. Elliott, 1882.* 



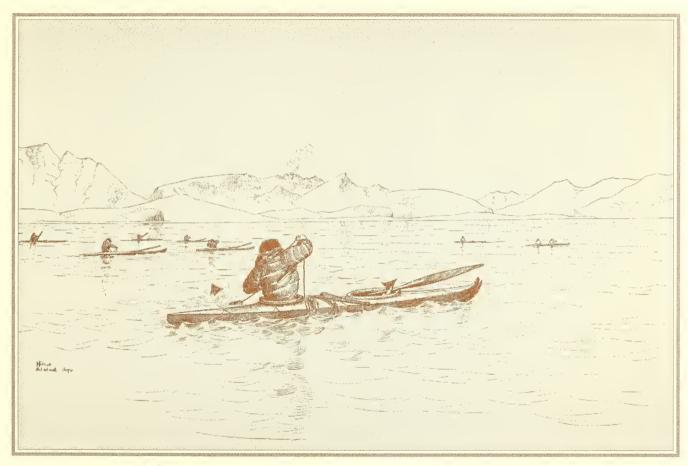




**The George's Bank cod fishery.** Splitting and washing George's Bank cod at Wonson's wharf, Gloucester, Massachusetts. *Drawing by H.W. Elliott, 1882.* 







The cod fishery of Alaska. Natives in boats fishing with hand-lines [artist unknown].







**The gill-net cod fishery.** Underrunning cod gill-nets in Ipswich Bay, Massachusetts. *Drawing by Capt. J. W. Collins*.



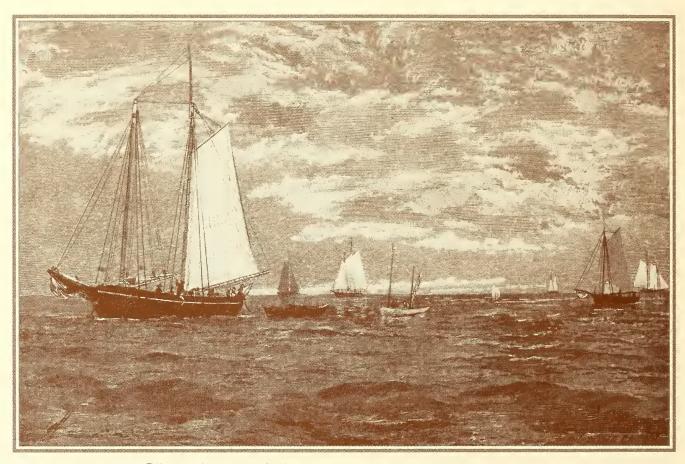


**The inshore cod fishery.** Block Island boat and crew hand-lining for cod. *Drawing by H.W. Elliott and Capt. J.W. Collins.* 

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The inshore cod tishery. Pink stern schooner and boats hand-line fishing off Cape Ann, Massachusetts. From photograph by T.W. Smillie.

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**The haddock fighery.** Baiting trawls of Gloucester haddock schooner Mystic, Captain McKinnon. From photograph by T.W. Smillie.







**The haddock fishery.** Baiting trawls at night in hold of haddock schooner. *Drawing by H.W. Elliott, 1882.* 







**The haddock fishery.** Setting haddock trawls from schooner under sail; set at right angles to course of the vessel. *Drawing by H.W. Elliott and Capt. J.W. Collins.* 







**The hake fighery.** Fishermen's dories on the rocks at Folly Cove, Cape Ann, Massachusetts. *Drawing by H.W. Elliott.* 

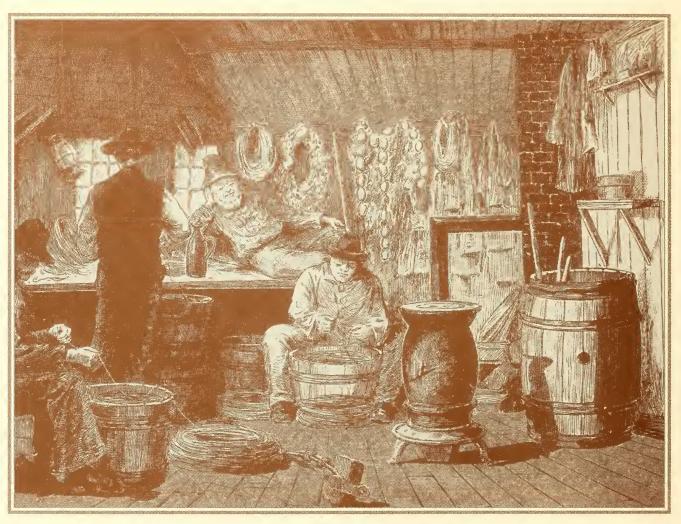




The hake fishery. Fishermen in dory hauling trawl; a dogfish caught. From photograph by T.W. Smillie.

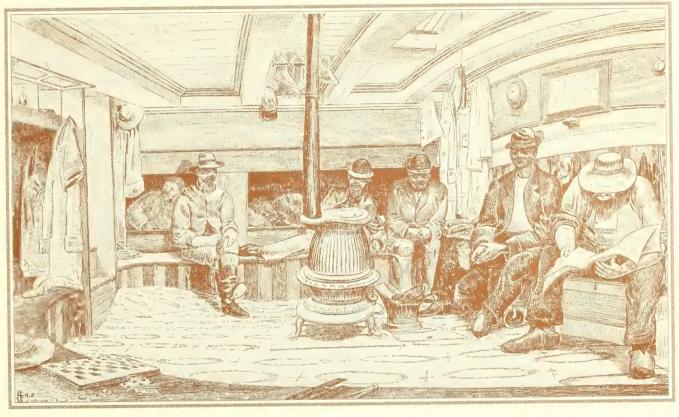






**The hake fighery.** Overhauling trawls in fish-house at Rockport, Massachusetts. *Drawing by H.W. Elliott.* 





The mackerel purse-seine fishery. The cabin of mackerel schooner John D. Long of Gloucester, Massachusetts. *Drawing by H.W. Elliott.* 



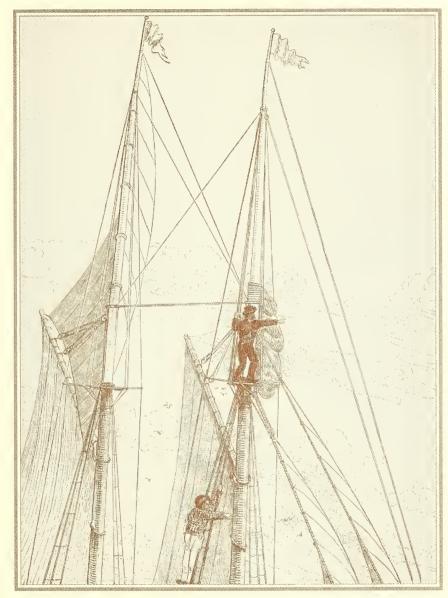




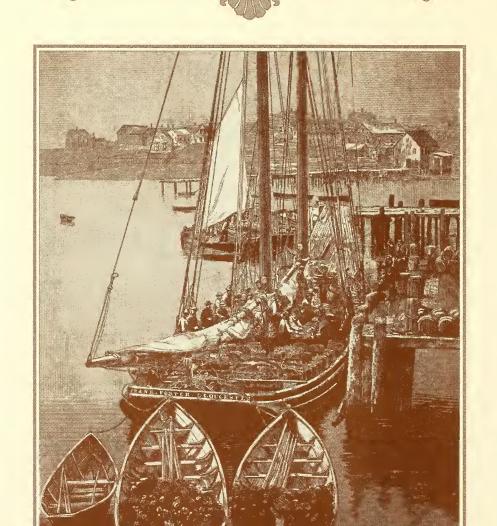
The mackerel purse-seine fishery. Seine boats in winter quarters at Gloucester, Massachusetts. From photograph by T.W. Smillie.

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The mackerel purse-seine fishery. Lookouts aloft on schooner on the watch for mackerel. *Drawing by H.W. Elliott and Capt. J.W. Collins.* 



The mackerel purse-seine fishery. Mackerel schooner just arrived from cruise; crew dressing and salting the fish. From photograph by T.W. Smillie.







The mackerel purse-seine fishery. Culling and packing mackerel at Portland, Maine. From photograph by T.W. Smillie.







The mackerel hook fishery. Surf-fishing in boats for mackerel. Drawing by H.W. Elliott and Capt. J.W. Collins.



The mackerel hook tishery. Gaffing mackerel over the vessel's rail. Drawing by H.W. Elliott and Capt. J.W. Collins.







The mackerel hook fishery. Fig. 1. The old method of chopping mackerel bait. Fig. 2. The modern mackerel bait-mill. Drawings by H.W. Elliott and Capt. J.W. Collins.





**The mackerel hook fighery.** Deck scene on mackerel hand-line schooner; jigging mackerel, slatting in the barrel, throwing toll-bait. *Drawing by H.W. Elliott and Capt. J.W. Collins.* 



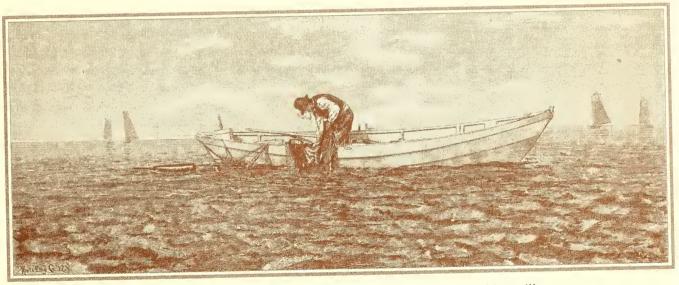




The mackerel hook fishery. Mackerel packing on shipboard. Fig. 1. Splitting, cleaning, and washing. Fig. 2. Pitching, salting and plowing. Drawings by H.W. Elliott and Capt. J.W. Collins.



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The mackerel gill-net fishery. Dory fishermen picking gillnets. From photograph by T.W. Smillie.







The swordfish fishery. Sword fishermen in position for action. From Report U.S. Fish Commission, Part VIII, 1880 [artist unknown].



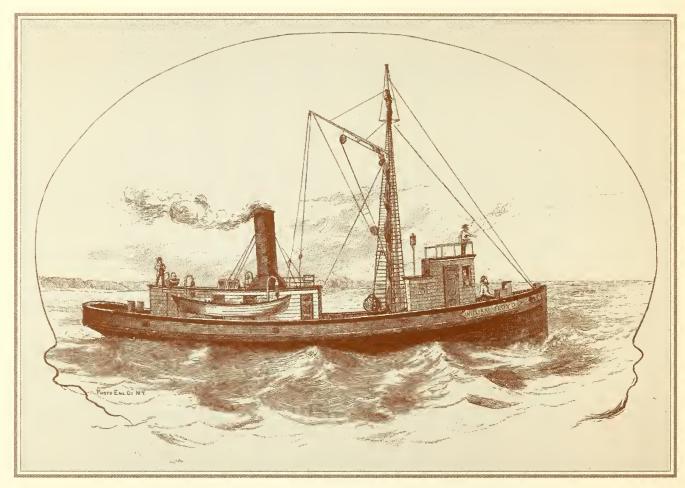




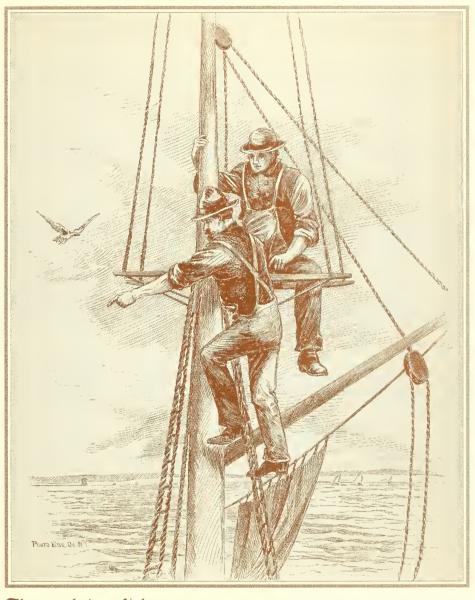
**The swordfish fishery.** Methods of swordfish capture in the Mediterranean Sea. From Report U.S. Fish Commission, Part VIII, 1880 [artist unknown].







The menhaden tishery. Menhaden steamer William Floyd cruising for fish. From sketch by Capt. B.F. Conklin.



**The menhaden fighery.** Lookouts at mast-head of menhaden steamer watching for schools of fish. *From sketch by J.S. Ryder.* 



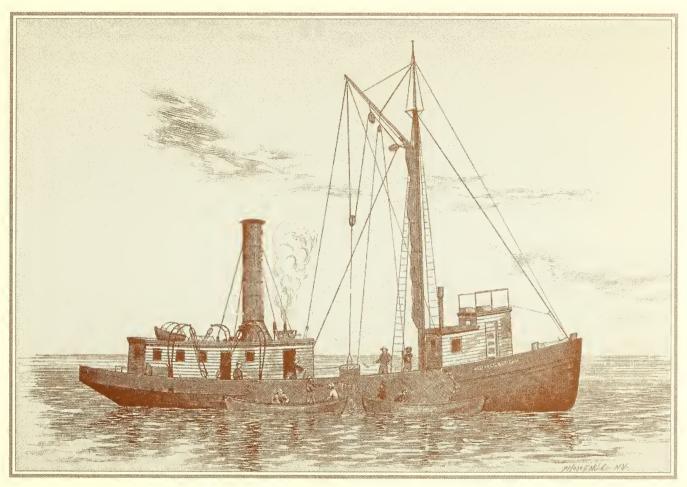


The menhaden fishery. Bailing menhaden from purse-seine into steamer's hold. From sketch by J.S. Ryder:

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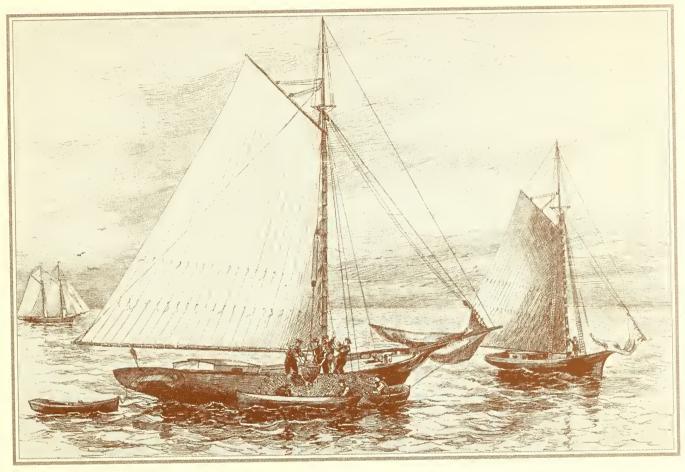
**The menhaden tighery.** Menhaden steamer bailing in the catch. *From sketch by Capt. B.F. Conklin.* 







**The menhaden tighery.** Haul-seine fishing for menhaden at Long Island, 1790 to 1850; taking out the fish. *From sketch by Capt. B.F. Conklin.* 



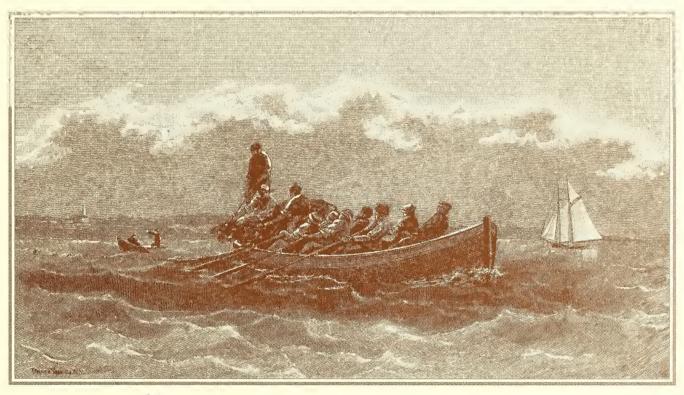
**The menhaden fishery.** Menhaden carry-away sloops bailing in the catch. *From sketch by Capt. B.F. Conklin.* 





**The menhaden fishery.** Menhaden fishermen signaling to shore-crews the approach of a school of fish [artist unknown].





The menhaden fishery. Crew of menhaden schooner, in old-style seine-boat, throwing the purse-seine [artist unknown].

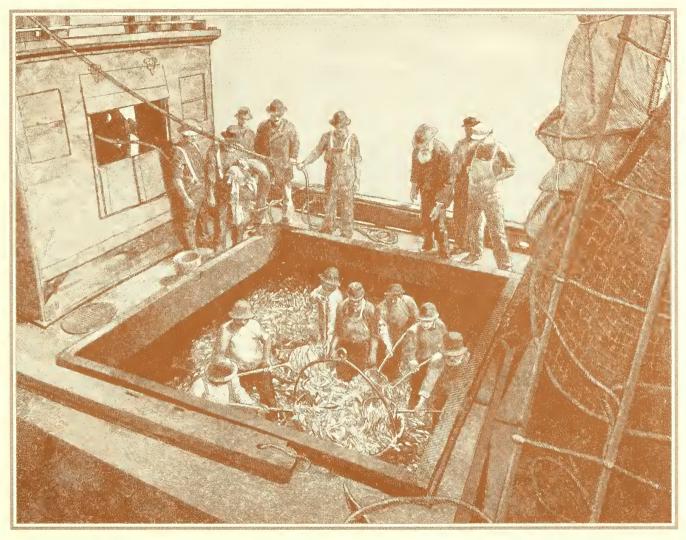




The menhaden fishery. Menhaden steamer discharging its catch at oil and guano factory, Tiverton, Rhode Island. From photograph by T.W. Smillie.



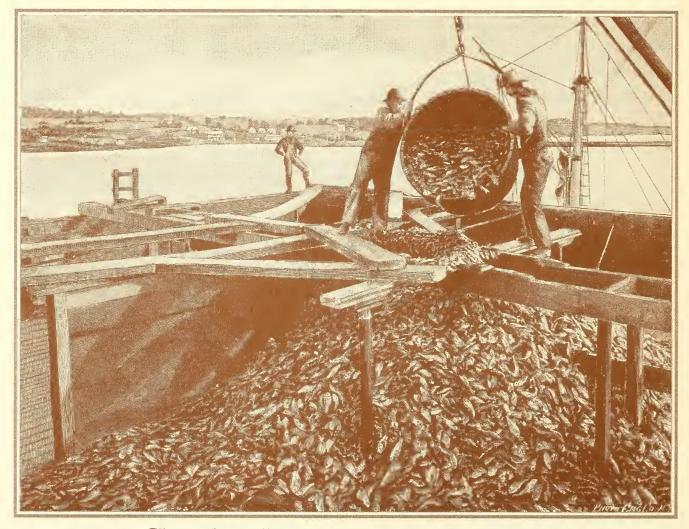




**The menhaden fishery.** Gang of Portuguese in hold of menhaden steamer filling the hoisting tubs. From photograph by T.W. Smillie.



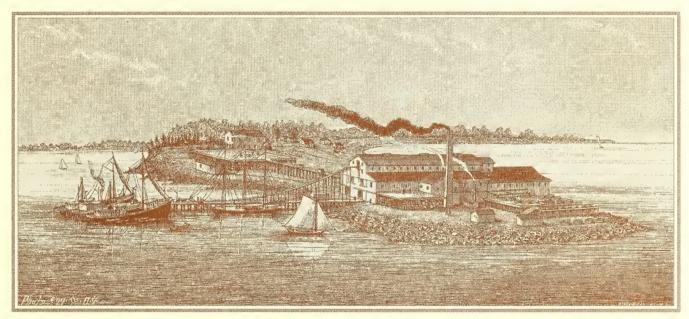




The menhaden fishery. Fish pens on top floor of menhaden factory; the fish are led through a trough to the cooking tanks. From photograph by T.W. Smillie.

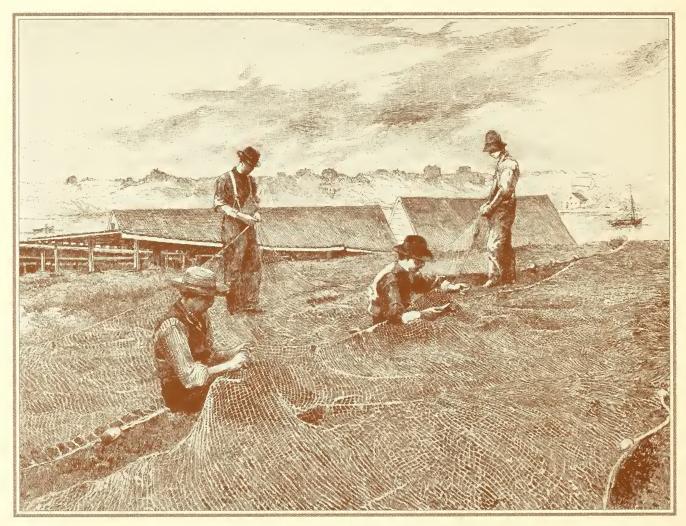






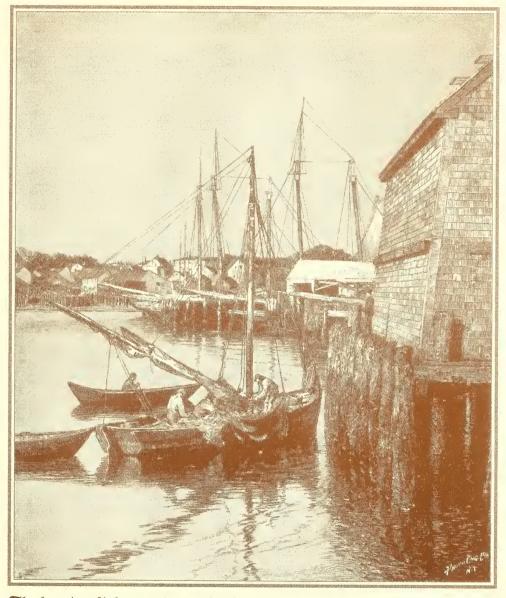
The menhaden fishery. Menhaden oil and guano factory at Milford, Connecticut; steamers unloading fish at the wharf; incline railway to carry fish to cooking tanks on upper floor of factory; oil tanks and storage sheds in foreground; platform for drying scrap in rear of factory, connected with building by elevated railway. From a photograph [photographer unknown].





The herring fishery and sardine industry. Fishermen mending herring gill-nets at House Island, Casco Bay, Maine. From photograph by T.W. Smillie.





The herring fishery and sardine industry. Irish fishermen of Boston picking their herring nets in Gloucester Harbor; the typical "Irish market boat." From photograph by T.W. Smillie.

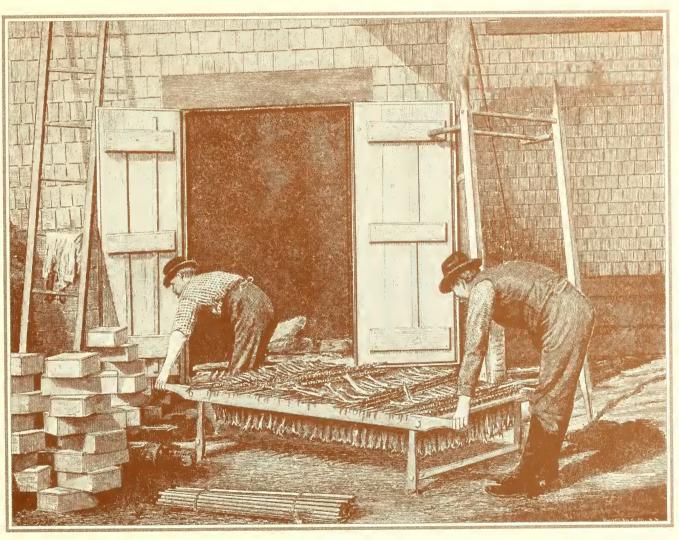






The herring fishery and sardine industry. Cape Ann herring fishermen landing their gill-nets after a night's fishing. From photograph by T.W. Smillie.





The smoked herring fishery. Herring "horse" loaded with smoked fish on sticks. From photograph by T.W. Smillie.

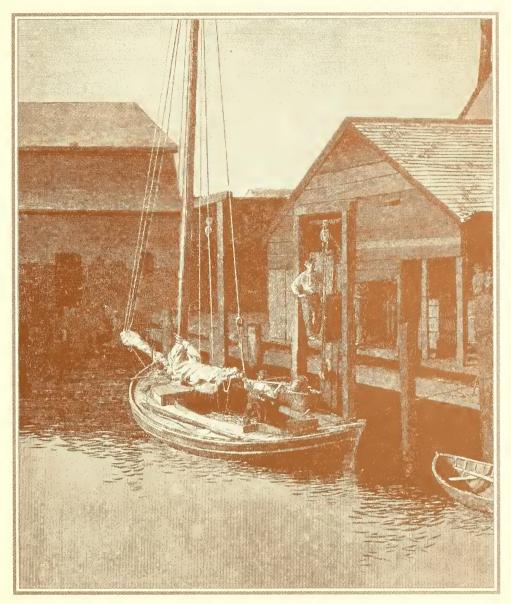




The sardine fishery. Fishing a herring weir at low tide near Eastport, Maine. From photograph by T.W. Smillie.







**The sardine fishery.** Herring boat landing fish at a sardine cannery, Eastport, Maine. From photograph by T.W. Smillie.

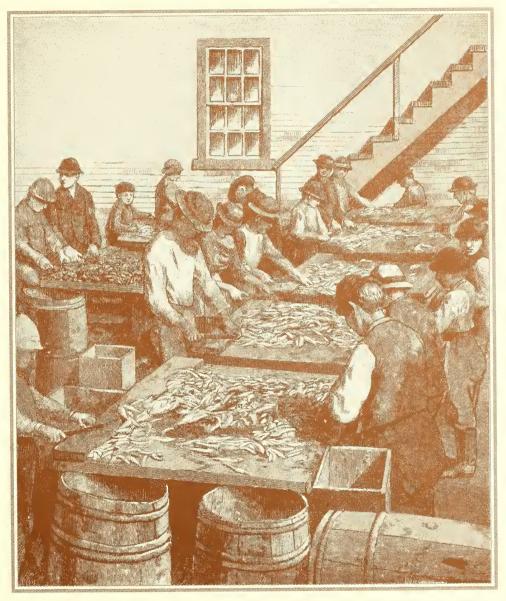






The sardine tishery. Sardine steamer for collecting herring and towing weir boats. From photograph by T.W. Smillie.





The sardine fishery. Children at sardine cannery cutting off the heads and tails and cleaning small herring for canning. From photograph by T.W. Smillie.



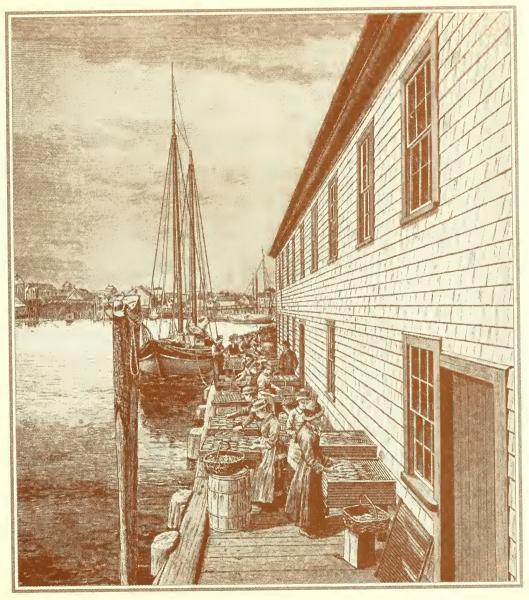




The sardine fishery. Washing, draining, and flaking herring at sardine cannery, Eastport, Maine. From photograph by T.W. Smillie.



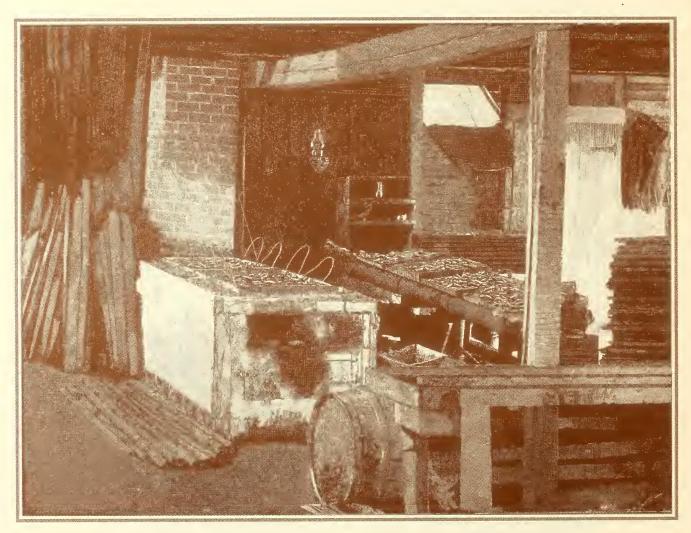




The sardine fishery. Spreading herring on flakes for drying in the sun or in an oven. From photograph by T.W. Smillie.







The sardine fishery. Frying room in sardine cannery, Eastport, Maine; herring frying in pans of oil. From photograph by T.W. Smillie.



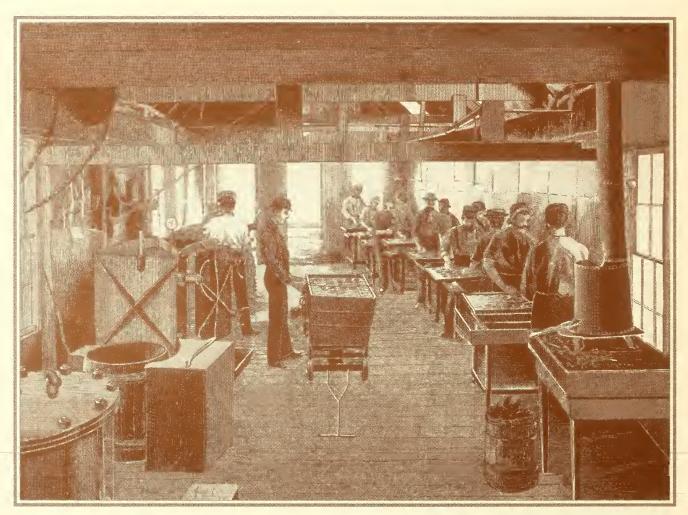




**The sardine fishery.** Packing room at sardine cannery, Eastport, Maine; packing herring-sardines in tin boxes. From photograph by T.W. Smillie.



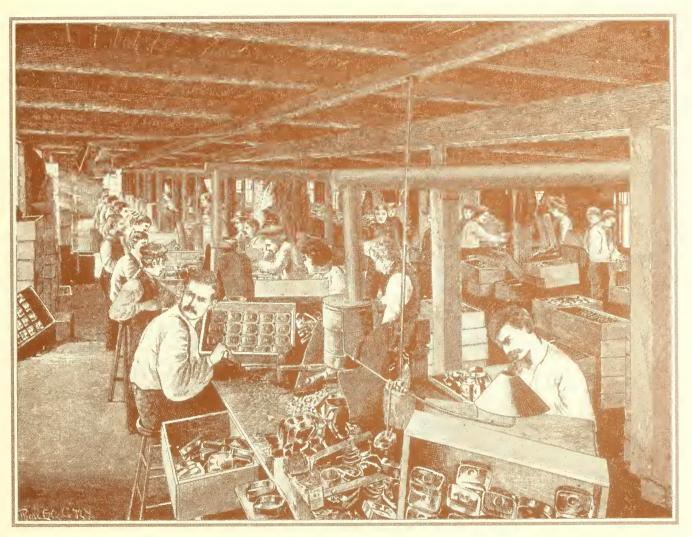




The sardine tishery. Bathing room at sardine factory, Eastport, Maine; bathing vats at the left; men at right venting cans. From photograph by T.W. Smillie.







The sardine fishery. Making sardine cans at Eastport, Maine. From photograph by T.W. Smillie.



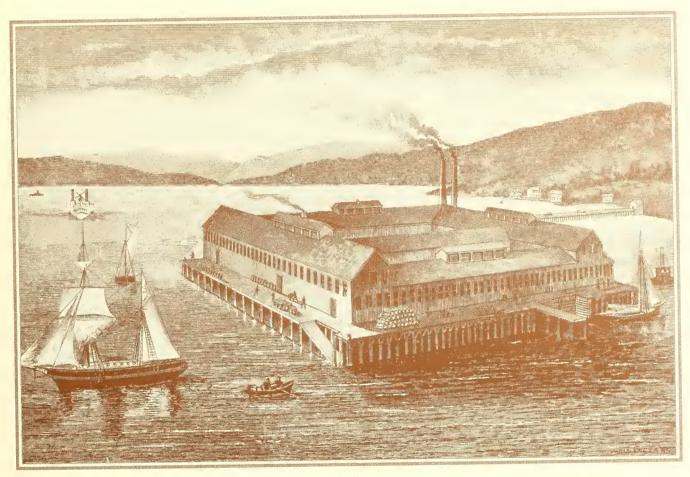




The mullet fishery. Camp of mullet fishermen, North Carolina. From a photograph [photographer unknown].



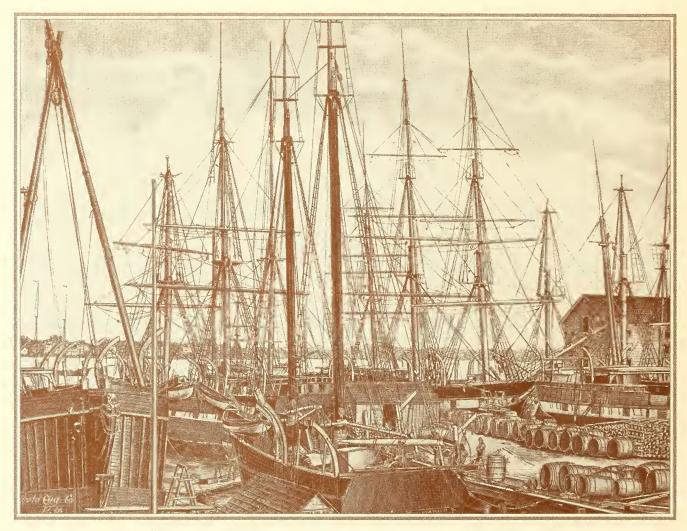




The Pacific Coast salmon fishery. Salmon cannery at Astoria, Oregon. From a photograph [photographer unknown].







**The whale fishery.** Whaling vessels fitting out at New Bedford wharves. *From photograph by T.W. Smillie.* 



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**The whale tishery.** Boat fastened to whale by harpoon and line; killing the whale with bomb lance. *From painting by J. S. Ryder.* 

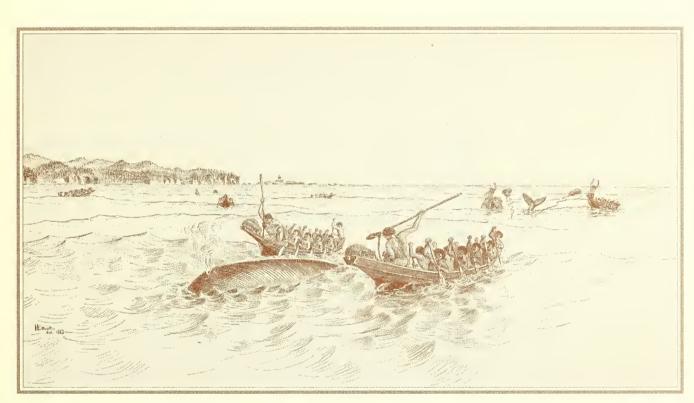






**The whale fishery.** Aleuts planting glass, obsidian and jade darts in a school of humpback whales at Akoon Island, Bering Sea. *Drawing by H.W. Elliott*, 1883.

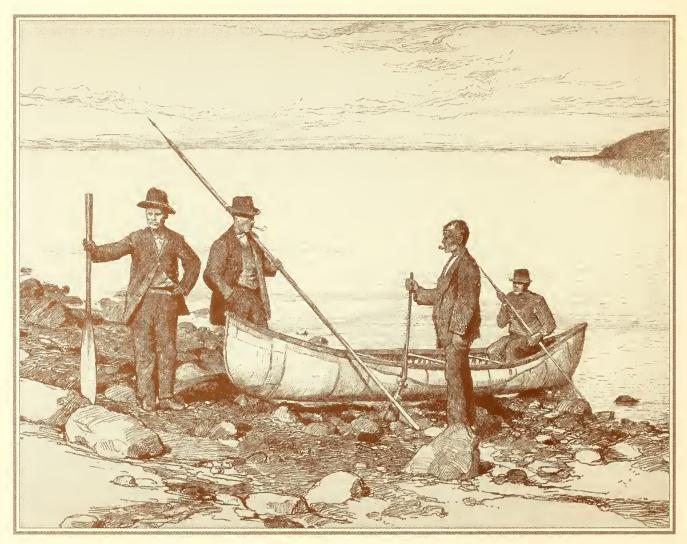




**The whale fishery.** Makah Indians whaling at entrance to Fuca Straits, Washington. *Drawing by H.W. Elliott, 1883.* 



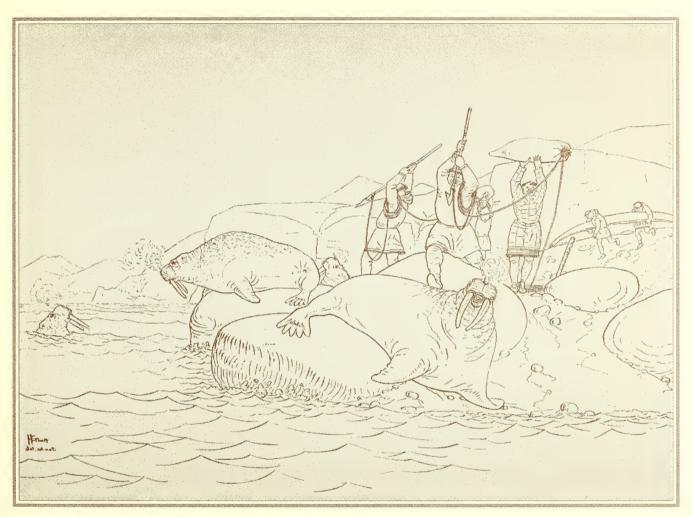




The blackfish and porpoise fishery. Indian porpoise hunters of Passamaquoddy Bay, Massachusetts; canoe, rifle, and lance for capture of porpoise. From photograph by T.W. Smillie.

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The Pacific walrus fishery. Innuits of Saint Lawrence Island, Alaska, surprising and harpooning a herd of walruses. *Drawing by H.W. Elliott.* 



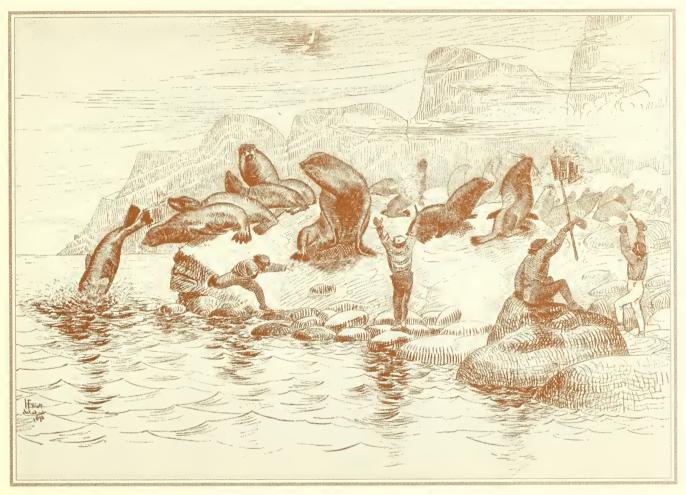




The fur-seal industry of Alaska. Ordinary attire of men on the killing ground and of women and young children in the village. *Drawing by H.W. Elliott.* 



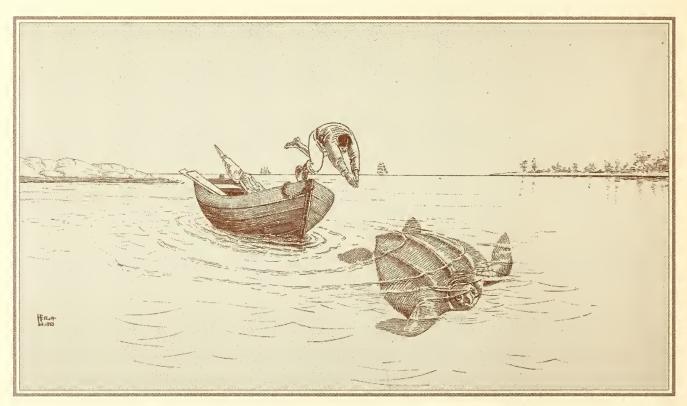




The sea-lion hunt on Pribylov Islands, Alaska. Natives capturing the sea-lion; springing the alarm. *Drawing by H. W. Elliott, 1873.* 



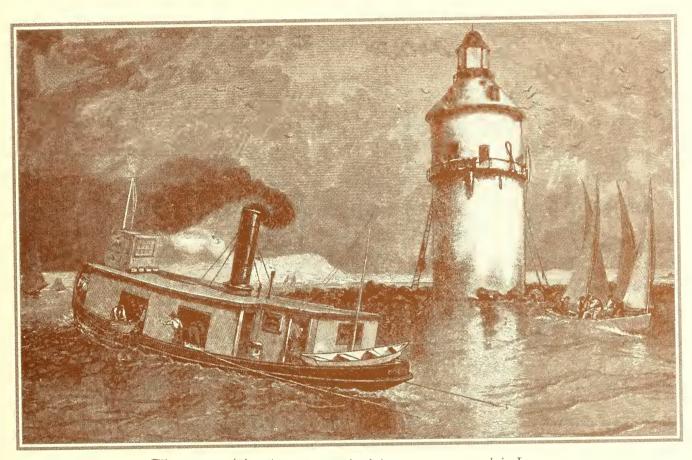




**The turtle fighery.** Diving for loggerhead turtle, Morehead City, North Carolina. *Drawing by H.W. Elliott, 1883.* 



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The oyster industry. Oyster dredging steamer at work in Long Island Sound [artist unknown].

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The oyster industry. Opening or shucking oysters in Baltimore packing house. From a photograph [photographer unknown].



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**The clam industry.** Opening or shucking clams at Essex, Massachusetts. From photograph by T.W. Smillie.







**The crab fighery.** Black fishermen trawling for crabs on the Virginia and North Carolina coasts. *Drawing by H.W. Elliott.* 

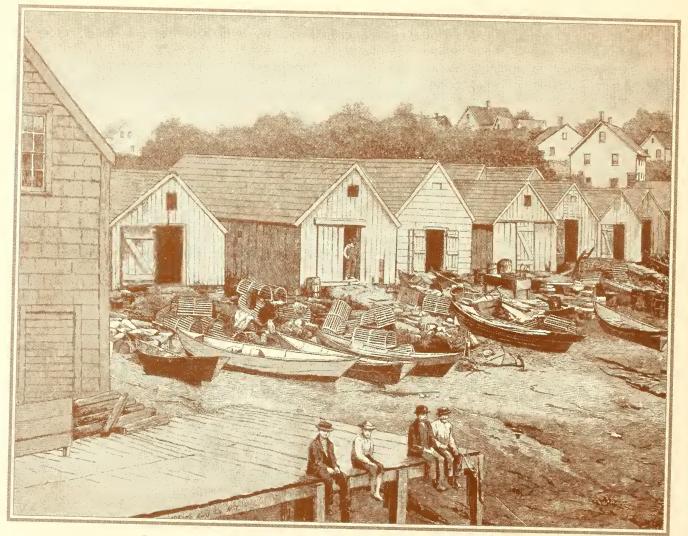




**The lobster fishery.** Dory fishermen hauling lobster pots off Cape Ann, Massachusetts. From photograph by T.W. Smillie.



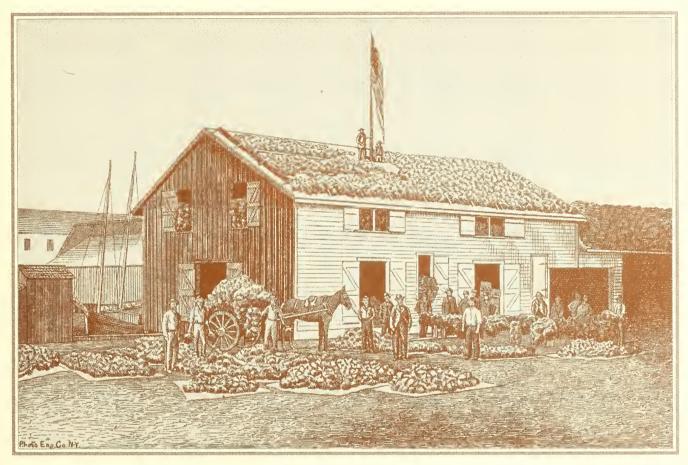




The lobster fishery. Lobster Cove at Lanesville, Cape Ann, Massachusetts, showing fishermen's boat-houses and gear. From photograph by T.W. Smillie.







**The Florida sponge industry.** Sponge-loft at Key West, Florida. From a photograph [photographer unknown].







The florida sponge industry. Sorting, trimming and baling sponges at Key West, Florida [artist unknown].



